

*Brazil 1978*

*Bahia*

# MEMO BOOK

42 SHEETS 6 IN. x 4 IN.

Formerly  
No. K-4216

**Camp Manufacturing**  
Baltimore, Maryland 21230

Sheaffer Eaton Division of Textron Inc.

0





Brasil 1978

with no n° de 1977 fê  
2459 (Rio da Alma)  
comparar 2460 -)



flor to caifora

2 Feb

31 January

3<sup>a</sup> 31<sup>ja</sup> -  
mante.

2460<sup>v</sup>

Retbergia

2461<sup>v</sup>

Acanthaceae

2462<sup>v</sup>

Jesneriaceae

2463<sup>v</sup>

Bromel. Tillandsia

2464<sup>v</sup>

Argemoneae

2465<sup>v</sup>

Boraginaceae

1<sup>o</sup> Feb - 4<sup>a</sup> micole

2466

Acanthaceae (blanca)

2467<sup>v</sup>

Alvimia tenuis

2468<sup>v</sup>

Al. grandifolia

(no herbarium)

2469<sup>v</sup>

Al. tenuis new local.

2470<sup>FBA</sup>

Acanthaceae (vermelha)

2471<sup>FBA</sup>

Acanth. blanda.

2472<sup>v</sup>

Acanth. flor pequena

violeta

2473<sup>v</sup>

Atractothoe radiata

2474

~~Atractothoe~~ flores

Feb. 3<sup>o</sup>

2475<sup>v</sup>

Atractothoe radiata



Bahia, Mun. of Itacaré, on  
rampa of Embatel TV  
tower, 4 km from  
junction with road to  
Itacaré and 20 from  
Br 101 road.

Serra do Jacutinga

Bahia 1978

mate, Jan. 31.

Retbergia = Chusquea 2460

Br, Mun. de Itacaré, on  
rampa of Embatel TV  
tower, 4 km from  
junction with road to  
Itacaré and 20 from  
Br 101 road.

Serra do Jacutinga

~~alt~~

Alt: spine,  $\pm$  500 m  $\pm$   
(no altimeter)

Retbergia in flower,  
Beautiful forest in  
excellent condition on  
high sierra!, bamboo  
growing on slopes  
climbing over trees,  
plants or ground, not  
forming dense clumps



not even small ones  
I all group of  
culm, here and  
there, really mixed  
in the forest.

At present looks like  
the thick of flowering  
cycle. Most looks  
pretty and all over  
by flowers.

I flip it's the same  
Kettergic I collected in  
72 & 76 in jaguar  
haze, most lanceolate  
leaves, few branches x  
nodes, in great  
Kettergic style! Culm  
arise, ~~the~~ culm  
leaves tightly persistent  
I flower in head  
or balls at end

of branches with  
leaves complete.  
(I fl. took at first  
glance and without lens  
Athroostachys) with  
long setae! with some-  
thing on top of setae.  
Many in fl. in full  
or partial anthesis  
(~~that~~ I could not  
photograph (or for)  
plants or study in  
great detail & very  
rich; I was very rich

Still we were able to  
find few new culms  
collected a lot of  
material of every  
part of plant.



The inflorescence looks  
like a short peti-  
celated "raceme" or  
"panicle" unilaterial,  
confined on the  
lower side

Few photos in color  
and b. & w. - from  
material already  
sent -

Fixed: FAA, Bouquet? -

Inflorescence in 7 stages  
buds, leaves,  
bouquet? 3-1?  
bulky material ~~not~~ collected.

mate Jan. 31

2461

Acanthaceae

BR, Mun. de Itacare, on  
rural of Embraetel, TV tower  
4 km from junction with  
road to Itacare and 20  
km from BR 101, Serra  
do Jacutinga  
alt.  $\pm 500$  m. s.m. ~~Altitude~~

Photo: roll # Kodachrome

(OK!) -

herbarium only - no FAA? -

Common in primary forest  
on higher slopes of Serra  
Beautiful forest with  
bamboo (Chusquea, Scleria,  
Rattleria) in terminal  
Many Mimosaceae, Rubiaceae  
etc., and other legumes



plant.

Plants up to  $\pm 1$  m high  
many with flowers but  
still very young, few  
infl. with bracts green.  
Bracts bright light  
red, outer red, fls  
yellow. They start  
to open from the  
bottom up -

monte 31 de jan. 2462  
Gesneriaceae?

seeds to Jacutinga, same  
loc. as Retbergia -

In good forest on higher  
slopes of seeds -  
dense forest with  
bamboo. Epiphyte?, on  
trees about 0.50-1 m  
high. Flowers white  
("Pete Tolimon")

herbarium only -  
no photo, no FAA.



mounts 31 & eners 2463  
bromeliaceae Tillandsia!

terro to Jacutinga, same  
loc. as Retbergia.  
Epiphyte on a tree fallen  
Fl. blue & pink violet.  
I think there is only one  
specimen - put in  
herbarium - (too rich to  
to more)

mounts 31 & eners 2464  
Oncidium  
terro to Jacutinga,  
same loc. as Retbergia

Epiphyte on branches (leaves)  
of a fallen tree, Very  
small, a miniature of  
no more than 8-10 cm.  
Flowers yellowish -

collected alive also? I think  
it burned on the pick  
up -



mate 317 Jan.

2465

Boraginaceae

Serra do Jacutinga  
same loc.

Growing in primary forest  
on higher slopes of Serra

Forest of trees and bamboo  
intermixed. Shrub, about  
1.50 m. with white  
flowers.

mineiro, Feb. 14.

2466

Acantaceae

So, Mun. Ilheus, road

Oliveira - Vila Brasil,

(road to fazenda Ipiranga)

6 Km S.W. of Oliveira

Alt. 75 m.s.m.

Plants about 90 to 1.50 m  
high, with white flowers  
growing in "mata lito-  
ranea", Atlantic type of  
forest on white sand  
soil. Forest mixed with  
bamboo.



miércoles Feb. 1st.

2467

*Alvimia tenuis* (300 m.)  
Bo, Mun. de Ilheus, 16.5 Km SW  
of Olivença on road to  
(Fazenda Espiranga) Vila  
Brasil.

Alt. 75 m. s.m.

Same locality as first  
collected and discovered almost  
2 years ago<sup>(1976)</sup>. Place  
looks ~~now~~ a little  
different. The bamboo  
have been growing  
for at least one year,  
(I found inflorescences in  
April 1977). First they have  
cut a little area of  
the forest to enlarge the  
the original trail, now is



a road for cars, probably  
for timber. There are  
several patches where the  
bambusa has started to dry  
a little and now the  
forest looks more open.  
I was able to walk inside  
more easily.

I didn't see *infructuosa* so long  
as last year, many  
are ~~just~~ <sup>very</sup> ~~or medium~~  
and ~~look~~ <sup>are</sup> like broken  
rod, some *apical*, have  
already fell. Many  
fruits on the plants  
at all stages. ~~Also~~

Fruits look a little larger  
than the ones of *A. gracilis*.  
They are dark green  
and ~~are~~ shiny and  
a little curved on one side

like a bean. This is  
more evident on young  
fruits. When the fruit  
is very large and full  
is less evident but still  
curved.



Feb. 1.

2468

Alimnia grandifolia  
Bo, Mun. de Ilheus, 15.7 Km  
SW of Oliveira on road  
to Vila Brasil (fazenda  
Ipiranga)

Same loc. where it  
was discovered 2 years  
ago.

The plants still blooming  
although in several  
places already too  
dry and past.

Budding had been seen  
but I had to find  
a fruit in the plant  
The answer may be  
that the fruits are very  
large, larger than



the other species.

No herbarium collected  
but few fruits in  
FAD -

Feb. 1

2469

*Abrusia tenuis*

Ba, Mun. de Ilheus, road  
Olineuca - Vila Brasil  
(fazenda Espiranga road)  
18.3 Km SW of Olineuca

Growing in "mata lito-  
ranea", coastal type of  
forest on white sand  
soil. Forest partially  
cut down. Plants  
flowering but still  
not producing  
fruits.

Herbarium collected,  
FAD collected

This ~~is~~ new locality



is very near the old  
type locality, is the  
same type of forest  
in the road to  
fazenda Espiranga

Feb. 2

2470

Passifloraceae

Ba. Mun. de Ilheus, road  
Oliveira - Vila Brasil  
(road to fazenda Espiranga)  
ca 6-6.5 km SW of  
Oliveira

Growing in coastal type of  
forest on white sand  
soil. Forest mixed  
with two bamboos,  
*Arctantha radiata*  
and *Alvimia gracilis*  
climbing plant ca. 4-  
to 6 m high. Big  
beautiful flowers of  
brilliant red color, ~~the~~  
stamens with filament  
violet and anthers <sup>beams</sup> yellow



Photo taken in color  
FAA

Feb. 2

2471

Acantaceae

Ba. Mun. de Ilheus, Road  
Oliveira - Vila Brasil  
(road to fazenda Espiranga)  
6.5 km SW of Oliveira

climber plant at edge  
of good Atlantic type  
of forest on white  
sandy soil. ~~2-3 m~~  
~~more like~~

climber on shrubs or  
trees loc. 2-3 m. or more  
Flowers white, anthers  
cream color.



Feb. 2

2472

Acantaceae

Ba. Mun. de Alheus, road  
Olivença - Rio Brasil  
(road to fazenda Espiran-  
ça), 6 km SW of Olivença

Growing in Atlantic type  
of forest on white sand  
soil. Forest mixed  
with bamboo (*Alvimia  
gracilis*). At this time  
~~the~~ most of the bamboo  
is dry and dead. ~~The~~  
forest has clear up  
there's room to walk  
between the trees, and  
there is a much more  
light.

This *Acantaceae* was



growing in a clear  
patch. Climbing  
plant, 2-3 m high.  
Flowers small, lilac  
with violet spots

Feb. 2

2473

*Atractantha radiata*

Bar. Mun. de Ilheus, Road  
Olivença - old Brasil,  
6 km SW of Olivença.

Growing ~~at~~ near entrance  
of forest, "mata Utoré-  
ne", on white sand  
soil.

Small patch of *Atractan-*  
*the* in a forest where  
*Plinia gracilis* is  
the dominant plant.  
Most of the inflorescences  
with proflerate branches  
coming out of the  
inflorescences.



Feb. 3

2474

*Atractantha radiata*

Bo. Mun. de ~~El Estero~~ Una,  
Rood Una - Olivença,  
28 Km N of Una city.

Alt. 55 m.

Same locality as it was  
discovered in 1976 and  
probably type locality.  
The whole population  
still blooming, although  
some plants start to  
dry out. Most of  
the inflorescences are  
now proliferate.  
There are branches coming  
out of the inflorescences.



with seed nodes  
and reduce heads  
and the end they  
produce again 1-3  
spikelets. They come  
out of the base as  
spikes or rays, the  
inflorescences looking  
like big stars with  
the rays hanging. ~~for~~

Feb. 3

2475

*Arundo donax*

Bar. Mun. de Muna.

Same locality as the one  
collected the first time.  
Several plants seen with  
inflorescences dry and  
old. Hard to find  
one with young  
inflorescences. I have  
no idea when is the  
best time for flowering.  
The plants have no  
flowers or too old  
and dry.  
The dry inflorescences  
have very large, large

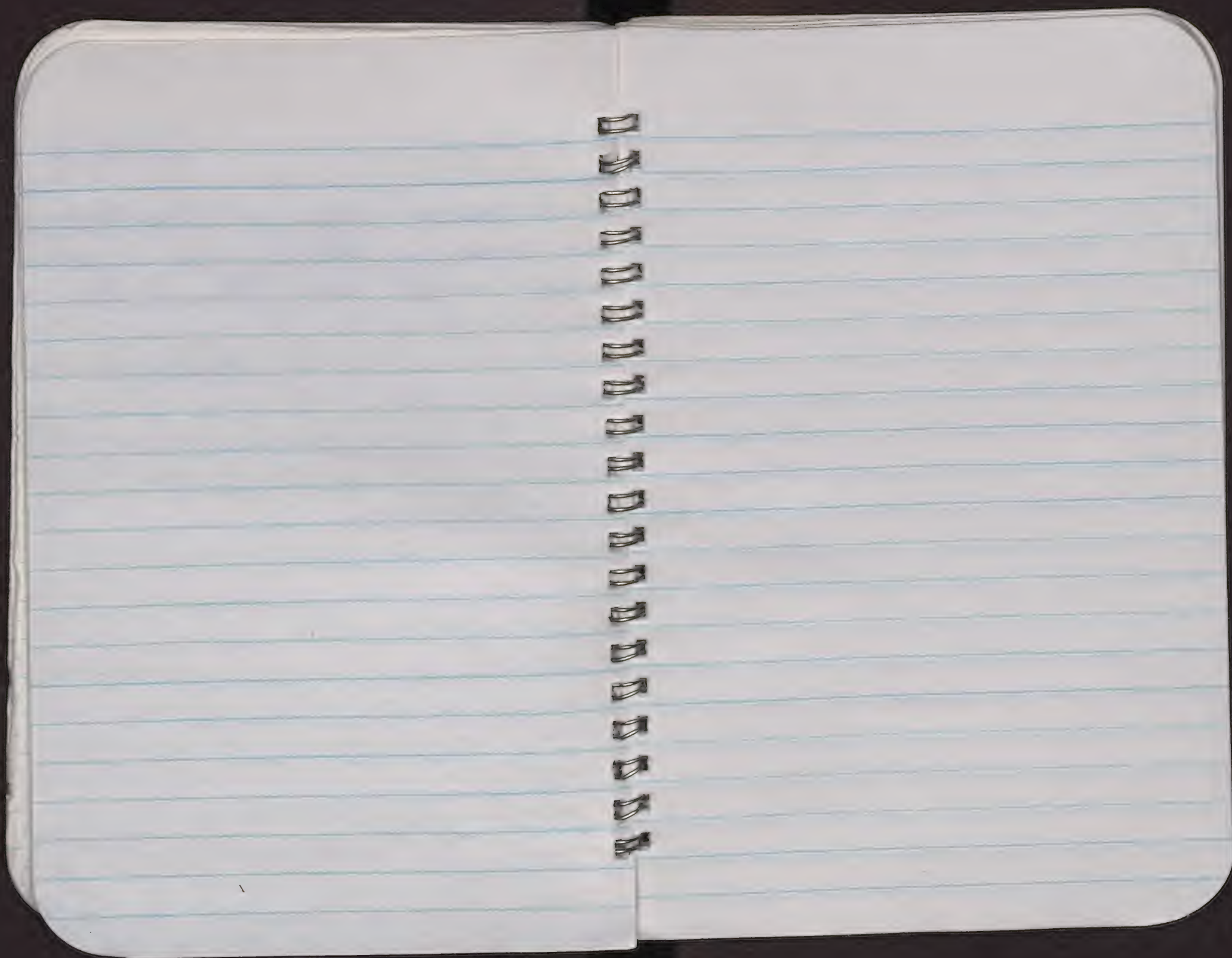


bracts.

collected only the  
dry inflorescences  
not the plants.

no photo -







Roll # 4 B & W  
#. Tennis courts 2467

Roll #  
note  
see  
see  
A.  
n  
n

insects

2461 Pearl River  
see: none as Petaluma

Flowers: orange-red bracts  
at flowers bright yellow  
about still young with  
few flowers before  
from inside forest -  
beautiful forest with

See  
16  
Roll (the  
note  
- note Roll  
- opposite?

Roll # 7 B & W

Rolling of H. forest  
the in forest. Stone

2 forest up - note. Pickers  
+ rolling of H. forest  
along side of road to  
note

Roll # 8 B & W

Rolling up forest  
note  
Rolling of H. forest  
note



V

males

2461 *Heptacanthaceae*.

Loc: same as *Retbergia*

Fls.: orange-red bracts  
and flowers bright yellow  
Plant still young with  
few flowers open -  
juicy inside forest -  
beautiful forest with  
many + plants in flower  
Plants about  $\pm 1$  m. tall -  
erect stems, 7-8 leaves  
same color -

H. grows in same soil  
as *Retbergia*, with  
many other *Retbergia* fls.,  
*Heptacanthaceae*, etc.



✓

Serra-

2462. Juncaceae  
same loc.

Epiphyte, on the arboresc.  
50 cm. altura,  
flor branca

✓

2463 Tillandsie

epifita - flor azul &  
coroa violeta -  
estambres brancos -

2464 ✓ Orquidea  
mini org. epifita  
8-10 cm - Flores  
amareladas

2465 ✓ Boraginaceae  
arboresc. 1.50 m.  
flor branca -

thinking



Alireza V. *microphylla*  
2466 *Antaceae?* (or *Ant.*)  
Fls. brancas - altura  
80, 90 até 1.40 - 1.50 -  
growing in the fl. forest  
Stn. radiata, leafy  
plant.

~~2467~~ 2470 *Antaceae*  
*triflora*, 4 or 5 até  
6 cm - fls. vermelhas  
estambes violetas & anteres  
vermelhos -

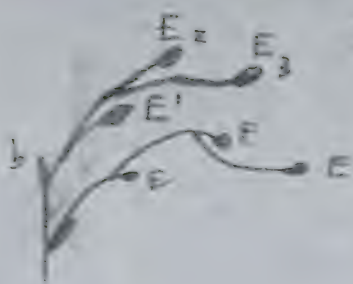
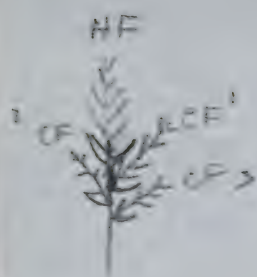
2471. *Ant. or Scroph.*  
*triflora* 2 m to 3 m  
fls. brancas - anteres  
vermelhos

2472 - *Ant. de fls.*  
violetas com manchas  
violetas, pequena, brancas



20'3 miles, Trepanco







Roll # 4 B & W  
# Tennis prints 2467

Roll # 5 # Tennis  
not with print ? or

reading - with Mark

A. macrophyle  
reading - (in Mark?)  
copy from rope  
copy from?

Roll # 6 Ektachrome  
(half roll + late 15  
inst 1 ut at 64! not  
160

Roll # 7 # Tennis  
reading of H. macrophyle  
- to Roll # 7. not  
opposite?

Roll # 7 B & W

reading of H. prints  
H. in large. Stone

2 pairs rope - white. Prints  
+ reading of H. prints  
along de. Also take  
macrophyle

Roll # 8 2KT-

Roll # 8 rope prints  
" " Stone also 3 exp-  
" " " " " "

Roll # 8 prints  
A. macrophyle



Roll # 1 Kollabo 64

Bonnie !!!

Bois, name de l'endroit

Acantoree

For of Retbergie in Hona  
Range to know

Roll # 3 B2 W-

if the all wrong  
at worst - ?

Retbergie

Acantoree ?

(too young, not of  
the good time

Roll # 2. Ethack 160

Retbergie in

Acantoree ?

Alvinie this fruit



500

160  
3  
480



